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REPORT ON MUNICIPAL WATER SUPPLY

FOR

PRICH, UTAH



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(9-12-66)

REPORT ON PRICE CITY'S PRESENT WATER RIGHTS AND WATER SUPPLIES
AND
FACTORS INVOLVED FOR INCREASING ITS PRESENT WATER SUPPLY

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The writer was requested by Erin Leonard, a Member of the Price City Council, to make an analysis of the City's present water rights and the supplies available thereunder, and recommend what steps should be taken to increase its present supply for municipal and domestic purposes. The writer's report and recommendations follow herewith.

PRESENT WATER RIGHTS

In checking the City's present water rights, the writer consulted the State Engineer's records and the report on the City's water supply prepared by Carl Nyman in 1947. The following is a list and present status of the City's present water rights, together with pertinent comments thereon.

Application A-405: This right consists of 2.25 sec. ft. diverted from Colton Springs. The original application states that the City owns 3,999 and $\frac{2}{3}$ shares of stock in the Price Water Company, and 2,100 shares in the Allred Ditch Company. 3,999 and $\frac{2}{3}$ shares in the Price Water Company is equivalent to 2.053 sec. ft. Inasmuch as the application calls for 2.25 sec. ft. and the and the 3,999.67 shares of Price Water Company cover 2.053 sec. ft. 0.197 sec. ft. must be made up from Allred Ditch Company water stock. One share of Allred Ditch Company water right is equivalent to .000521 sec. ft., requiring 378.24 shares of Allred Ditch Company water stock to cover the 0.197 sec. ft. out of the 2,100 shares. Application A-405 covers the change of point of diversion and the change of nature of use of the water from irrigation to municipal and domestic, from the intake of the Price Water Company canal to the Colton Springs. The water rights of the Price Water Company and the Allred Ditch Company were adjudicated under the Morse Decree with the period of use specified as being from March 1 to November 30 of each year. While application A-405 gives Price City the right to divert 2.25 sec. ft. of water from Colton Springs at this time during the period from March 1 to November 30, the City has acquired no right by virtue of the Price Water Company and the Allred Ditch Company water stock to divert water from the Colton Springs during the period from December 1 of each year to March 1 of the year following. This point will be discussed further later on in this report.

Application A-781: This application contemplated changing the point of diversion and nature of use of 2 sec. ft. of water, represented by stock in the Allred Ditch, from the intake of the Allred Ditch on Price River to a series of springs in Tokyune Canyon. This application was approved by the State Engineer on December 24, 1924. As far as the records of the State Engineer show, this application is still in good standing, however, no effort has been made since this application was approved to consummate the change, and the writer has been informed that there is not sufficient water in the spring area to warrant the change being made.

Application A-1146: This application provides for changing the point of diversion and nature of use from irrigation to municipal and domestic of 1.46 sec. ft. of water, represented by 2,904 shares of Price Water Company Stock. The stock is owned by Price City and the change is to be made from the intake of the Price Water Company canal to the Colton Springs. This application was approved by the State Engineer and final prpof of the change made and filed with the State

Engineer, and the State Engineer has issued a certificate authorizing the change to the extent of 1.46 sec. ft.

Here again, the City only acquired the right to make the change from March 1, to November 30, of each year. No transfer of the 2,904 shares of Price Water Company stock, to cover this change, has been made, and contrary to former advice, no transfer of this stock back to the Price Water Company should be made, as the City's possession of this stock is its only evidence that it has a water right that can be changed under application A-1146. Of course, the Price Water Company has no right to divert any water from Price River by virtue of this stock.

Application A-1147: This application contemplated changing the point of diversion and nature of use, of 1.01 sec. ft. of water covering 24 shares of Pioneer Ditch No. 1 water stock, 98.5 shares of Pioneer No. 2 Ditch water stock and 400 shares of Price Water Company water stock. The change was to have been made from the points of diversion of these ditches on Price River to springs in Fish Creek Channel. This application was approved by the State Engineer on July 31, 1931. No proof of change was submitted to the State Engineer and the application was withdrawn on May 19, 1936.

Application 8312: This application applied for the appropriation of 1.5 sec. ft. of water to be developed at the Colton Springs. The water is to be appropriated and used the year round for municipal and domestic purposes. This application was approved by the State Engineer on September 4, 1920, and proof of appropriation for .65 sec. ft. was submitted to the State Engineer on October 31, 1921, and a certificate for that amount has been issued by the State Engineer. This right is at the present time intact and in good standing.

Application 9322: This application contemplated the appropriation of .50 sec. ft. of water from an unnamed spring for domestic and municipal use the year round. The application was approved by the State Engineer on March 18, 1924 and was allowed to lapse on June 1, 1927 for failure to submit proof of appropriation of water.

Application 17936: This application calls for 5,000 acre ft. of water to be appropriated from White River and stored in a reservoir to be constructed on parts of sections 9 and 10, Tp. 10 S., R. 8 E. The water so stored is to be used for domestic and municipal purposes. This application was approved by the State Engineer on November 6, 1947, and until December 15, 1955 has been allowed to complete the appropriation and submit proof thereof. This application is at the present time in good standing in the State Engineer's Office.

Application 18809: This application was made jointly by Price City and Helper City. It contemplated appropriating 1,950 acre feet of water from Kyune Creek, storing the water in a reservoir to be constructed on said Creek. This application was approved by the State Engineer on February 24, 1948, but allowed to lapse on January 10, 1952, for failure to make proof of appropriation within the time allowed by the State Engineer.

Summarizing the foregoing water rights we get the following as the extent of the City's water rights to date:

Water Right	Status	Amount	Source of Supply	Remarks
A-405	Good Standing	2.25 sec. ft.	Colton Springs	Period use Mar.1 to Nov. 30
A-781	"	2.00 "	Springs in Tokyune Creek	Apparently abandoned
A-1146	"	1.46 "	Colton Springs	Period use Mar. 1 to Nov. 30
A-1147	Lapsed			
8312	Good Standing	.65 "	Colton Springs	Period Use - Year Round
9322	Lapsed	4.36		
17936	Good Standing	5000 Acre Feet	White River	
18809	Lapsed			

From the above table it is apparent that Price City has a right to 4.36 sec. ft. of which 3.71 sec. ft. has a use period from March 1, to November 30 of each year and .65 sec. ft. an all year round use period. From White River the City has a potential right to appropriate and store in a reservoir 5,000 acre feet.

While application A-781, for 2.00 sec. ft. of water from springs in Tokyune Creek Canyon, is still in good standing insofar as the records of the State Engineer's office show, the fact that this application was approved by the State Engineer on December 24, 1924, and very little, if any, work has been done toward the appropriation of the water in question since then, is evidence that the City has by inference abandoned this application.

PERIOD OF USE OF COLTON SPRINGS WATER: Theoretically, the City acquired no right by virtue of change applications A-405 and A-1146 to divert water from Colton Springs during the period from December 1 of each year to March 1 of the year following. The fact that the City has adversely diverted and used water from Colton Springs since 1918 in the case of A-405 and since 1931 in the case of A-1146, during the non-irrigation season, without protest or attempts to stop the City from doing so during the period from December 1 to March 1, the City has established an adverse right over such period which, in the writer's opinion, any court will uphold should any person now or in the future contest the City's adverse use. Therefore the writer does not deem it advisable for the City to, at this time, file an application to cover the gap, from December 1 of each year to March 1 of the year following, with respect to the two aforesaid applications.

CITY OWNED CANAL WATER STOCK: The City owns certain water stock in canals diverting water from Price River. The following table shows the amount and Canal Company in which stock is owned:

Canal Company	No. Shares Stock Owned	Remarks
Price City Canal	1,416.01	(City originally owned 4,320.01 shares of which 2,904 shares were used in exchange right under A-1146)
Pioneer Ditch Co. #1	34	
Pioneer Ditch Co. #2	186	
Allred Ditch Company	3,743.88	(City originally owned 4,122.12 shares of which 387.24 shares were used in exchange right under A-405.)

The amount of water represented by these Canal stocks follows herewith:

Canal Company	Shares of Stock	Water Equivalent	Shares Required per Acre Irrigated
Price Water Company	1,416.01	.73 sec. ft.	33 (43 ac. total)
Pioneer Ditch #1	34	.56 "	1 33 "
" #2	186	.76 "	4 46 "
Allred Ditch Co.	3,743.88	1.95 "	32 117 "
		<u>4.00</u> "	<u>239</u> Acres

From the foregoing table, Price City has the equivalent of 4 sec. feet of irrigation water from Price River to irrigate 239 acres of land by virtue of its water stock in the several canals. This water cannot be used for domestic and municipal use by the City without expensive pre-treatment. The question may be rightfully raised at this time - What value is this irrigation water to Price City? Of course, it should be leased or rented out every year to farmers who need additional water for irrigation purposes in order to get revenue out of it. However, these water shares do have a potential value for exchange rights if suitable domestic water can be obtained in exchange for this irrigation water.

For example, should the City be able to exchange this canal water for storage water in the Scofield Reservoir then 4 sec. ft. over a nine-month irrigation season would be equivalent to 3 sec. ft. over a 12 month round use. This would be the equivalent of 2190 acre ft. of yearly storage in the Scofield Reservoir which the City could draw on for municipal and domestic use. The foregoing figures are based upon the supposition that since the Scofield Reservoir was completed the 4 sec. ft. would be available in full over the entire irrigation season. It is, therefore, the writer's recommendation that the City's canal water stock should not be disposed of at this time but leased out from year to year until the City's water supply problem has been solved, as these canal water shares may come in handy in the interim in exchange agreements. If, after the City's water supply has been provided for to its full requirements and the canal water shares have not been used in that connection, then in the writer's opinion, the City should dispose of its canal water shares to its best advantage.

WATER SUPPLY REQUIRED BY PRICE CITY - In the writer's judgment, Price City should have a potential water supply to supply the municipal and domestic requirements of a total population of 12,000 people. This will allow for a substantial growth over the present population served. Assuming an average daily consumption per capita of 200 gallons, which is equivalent to 2,400,000 gallons per day for the above assumed population. It requires a direct flow of approximately 4 sec. feet to deliver 2,400,000 gallons per 24 hours. Price City now has a direct flow right from the Colton Springs of 4.36 sec. ft. However, the Colton Springs do not flow anywhere near 4.36 sec. ft. during the peak demand in the summer months, and as a result, Price City has been compelled to purchase water from the Price Water Company, through the Scofield Reservoir to tide it over the yearly peak demand. In the writer's opinion, Price City should have available at lease another 2,000 acre feet of water or its equivalent in sec. ft. in order to insure the City an ample supply for present needs and future growth. 2,000 acre feet of stored water will yield a 3 sec. ft., continuous flow for 333 days in each year.

The writer, being familiar with the watershed tributary to Price City and its water supply system, knows of no water resource, fit for domestic use, which would be available to the City, to the extent of 2,000 acre ft. annually, except the water stored in the Scofield reservoir.

STORAGE FACILITIES - Price City has, at the present time, two steel storage tanks, each of a capacity of 400,000 gallons. In addition, the City has an open ground storage reservoir which, the writer has been informed, has a storage capacity of 10,000,000 gallons. In the writer's opinion, the City's present storage facilities are ample for its present needs and for a substantial future growth in the City's water requirements.

SECURING WATER FROM SCOFIELD RESERVOIR - As heretofore stated, the only potable water supply within economic distance from Price City is the water stored in the Scofield Reservoir. Whether Price City can acquire a storage water right in the Scofield Reservoir to supplement its present municipal water supply is a matter yet to be determined.

The Scofield Reservoir was constructed by the U. S. Bureau of Reclamation under a tripartite agreement among the United States, Carbon Water Conservancy District and the Price River Water Conservation District. The writer has read and studied this tripartite agreement and cannot find anywhere in the agreement authorization for use of the water stored in the reservoir for any purpose other than irrigation. On the other hand the tripartite agreement contains no expressed prohibition against the use of the stored water for purposes other than irrigation. However, paragraph (b) Article 13, contains the following provision: "The irrigation District's right to the use of the waters of Price River and its tributaries, either by way of direct diversion or storage, are agreed to be, as of the date of this contract, only those based on the following applications on file in the office of the State Engineer of Utah; namely applications 1035, 8989a, 9594, and 13334". None of these applications, as the record of same in the State Engineer's office show, provides that any of the water to be appropriated under them is to be used for municipal purposes.

To get some sort of opinion whether water stored in the Scofield Reservoir could be used for municipal purposes, the writer contacted Reid Jerman and others in the local office of the Bureau of Reclamation and put the question up to them. The impression the writer got from the local reclamation boys was that they were uncertain whether water stored in the Scofield Reservoir could be used for municipal purposes under the existing tripartite agreement. However, they did intimate that the Reclamation Bureau has been changing lately, on the use of water stored in reservoirs for irrigation purposes, and in some cases have amended their water rights covering irrigation water to include its use for other purposes.

In view of the present uncertain status of the use of Scofield Reservoir storage water, the writer recommends that the matter of securing some of said reservoir storage water, to supplement the City's municipal water supply, be taken up with the members of the tripartite agreement to determine whether such water can be acquired by Price City, and if so, then also determine what bearing or relationship the following may have in negotiating terms under which the water may be acquired:

1. Can Price City negotiate for and acquire at least 2,000 acre feet of Scofield storage water?
2. Whatever quantity the City may acquire, can it use same when needed the year round, or must the City be limited in its use to the Irrigation Season?
3. Can the City exchange its canal water shares for storage water in the Reservoir?

4. Can the City use its Price River Water Conservation Bonds as part payment for any water it might acquire a right to in the Scofield Reservoir?

From the foregoing report, it is apparent that Price City is in need of an additional potable water supply in order to meet its present demands and future growth; that the only potable water supply within economic reach of the City is Scofield Reservoir storage water; that it is imperative that some plan be worked out or agreement reached with the present Owners of the Scofield Reservoir that will permit and make available to Price City storage water in the reservoir for municipal use.

In conclusion, the writer recommends that contacts be made immediately with the present owners of the Scofield Reservoir to determine what the chances are for the City to acquire water from the reservoir for municipal use and what steps must be taken to consummate such right.

Respectfully submitted,

C. J. ULLRICH (Signed)

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(9-12-52)

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